PB89-135305

Superfund Record of Decision (EPA Region 3) Douglassville Disposal Site Berks County, Pennsylvania (Second Remedial Action), June 1988

(U.S.) Environmental Protection Agency
Washington, DC

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U.S. Department of Commerce
National Technical Information Service
NTIS

United States
Environmental Protection
Agency

Office of
Emergency and
Remedial Response

EPA/ROD/R03-88/041
June 1988

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EPA

Superfund Record of Decision:

Douglassville Disposal, PA

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U.S. DEPARTMENT OF COMMERCE
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15. Supplementary Notes

16. Abstract (Limit: 200 words)

The Douglassville Disposal site occupies approximately 50 acres of land in Union Township, Berks County, Pennsylvania. It is almost entirely within the 100-year floodplain of the Schuylkill River. In 1941, Berks Associates began recycling lubrication oil at the site; waste solvents were recycled in the 1950s and 1960s. Wastes generated from those recycling processes were stored in onsite lagoons from 1941 until 1972. In November 1970, heavy rains caused the lagoons to overflow and release 00,000 - 3,000,000 gallons of wastes down the Schuylkill River. Federal and State actions were initiated to dispose of the waste material remaining in the lagoons. Before this action could be carried out, heavy rains from a hurricane caused the river to overflow its banks and inundate the entire site area in June 1972. An estimated 6,000,0000 - 8,000,000 gallons of wastes were carried by floodwaters downstream for about 15 miles. During cleanup after the storm, the lagoons were drained and backfilled by EPA. Lubrication oil recycling operations continued at the site until 1979 when the operator determined operational correction mandated by the Pennsylvania Department of Environmental Resources (PADER) were cost prohibitive. Operations then turned to the practice of refining waste oils for use as fuel in industrial boilers. Beginning in 1979, oily waste sludge from the new recycling process was landfarmed onsite. This
(See Attached Sheet)

17. Document Analysis a. Descriptors

Record of Decision
Douglassville Disposal, PA
Second Remedial Action
Contaminated Media: debris
Key Contaminants: inorganics (lead), PAHs, PCBs, VOCs

b. Identifiers/Open-Ended Terms

c. COSATI Field/Group

18. Availability Statement	19. Security Class (This Report) None	21. No. of Pages 45
	20. Security Class (This Page) None	22. Price

(See ANSI-Z39.18) See Instructions on Reverse OPTIONAL FORM 272 (4-77)
(Formerly NTIS-35)
Department of Commerce

EPA/ROD/R03-88/041
Douglassville Disposal, PA
Second Remedial Action

16. ABSTRACT (continued)

practice was halted in 1981 when PADER mandated operational corrections to the landfarming practices. In late 1985, all oil recycling operations at the facility were completely discontinued. This operable unit addresses the 3-4 acre area in the southern most portion of the site and is hydraulically upgradient of the rest of the site. The area consists of a concrete building, process equipment, piping, and at least 57 process tanks. The tanks are constructed of wood, concrete, or steel and range in size from 3,000 gallons to 600,000 gallons. Approximately 200,000 gallons of PCB and lead contaminated oil and waste sludges remain in the tanks. The buildings, tanks, tank wastes, and processing equipment are impediments to any future soil and ground water remediation, and are a source of continuing contamination of these media. The primary contaminants of concern include: VOCs, PCBs, PAHs, and lead.

The selected remedial action for this site includes: removal of liquid and sludge tank waste with transportation to an offsite incineration facility; decontamination of tanks, piping, processing equipment, and building materials; offsite disposal of building rubble, selling of tanks and other metal materials as scrap; offsite disposal of concrete, asphalt, and other materials; and treatment of generated decontamination fluids, as appropriate. The estimated capital cost for this remedial action is $4,050,000. No O&M will be incurred.

1.a

DECLARATION FOR THE RECORD OF DECISION

Site Name and Location

Douglassville Disposal Site - Union Township, Berks County, Pennsylvania.

Statement of Basis and Purpose

This decision document represents an operable unit remedial action for the Douglassville Disposal Site developed in accordance with the Comprehensive Environmental Response, Compensation, and Liability Act, as amended, and to the extent practicable, the National Contingency Plan.

This decision is based upon the administrative record. The attached index identifies those documents which comprise the administrative record. The following were of particular relevance for the purposes of this decision document:

1. Remedial Investigation Report/Feasibility Study of Alternatives, Volumes I, II, and III, Berks Associates, Douglassville Disposal Site, Union Township Berks County Pennsylvania, prepared by NUS Corporation, June, 1986.

2. Final Focused Feasibility Study/Facility Removal, Douglassville Disposal Site, Berks County, Pennsylvania, prepared by NUS Corporation, April, 1988.

The State of Pennsylvania concurs on the selected remedy.

Description of the Selected Remedy

This is an operable unit in the process of remediation of the Douglassville Disposal Site. Other remedial actions will be delineated in future Records of Decision.

The selected site remedy does not attempt to meet compliance with all applicable or relevant and appropriate requirements (ARARs) which would be pertinent to a final remedy for the site. However, this remedy will be consistent, to the extent practicable, with those ARARs which are pertinent to the particular circumstances of this operable unit.

The selected remedial action consists of:

1. Removal of the liquids and sludges remaining in the tanks of the former processing facility.

2. Removal of liquids and sludges from incidental tanks and trucks on other portions of the facility.

3. Transporting these liquids and sludges to an offsite facility for incineration.

4. Decontamination of tanks, piping, and structures.

5. Dismantlement of the entire former processing facility.

6. Disposal of the uncontaminated tanks by sale as scrap.

7. Disposal of the uncontaminated rubble in an offsite disposal facility.

8. Disposal of rubble which cannot be satisfactorily decontaminated in an offsite permitted hazardous waste disposal facility.

Declaration

The selected operable unit remedy is protective of human health and the environment, attains Federal and State requirements that are applicable or relevant and appropriate, and is cost effective. The action being taken is appropriate when balanced against the availability of Trust Fund monies for use at other sites. This remedy satisfies the preference for treatment that reduces toxicity, mobility or volume as principal elements. Finally, it is determined that this remedy utilizes permanent solutions and alternative treatment technologies to the maximum extent practicable.

12/28/85
Date

James M. Seif
Regional Administrator
Region III

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Site Description and Summary of Remedial Alternative Selection for the Douglassville Disposal Superfund Site Former Processing Facility/Tank Farm Operable Unit

Introduction

The Superfund investigation of the Douglassville Disposal Site addresses various environmental media and their contamination with polychlorinated biphenyls (PCBs), lead, volatile organic compounds and polynuclear aromatic hydrocarbons (PAHs) in an oil matrix. For the purposes of the investigation, the site has been divided into areas suspected of containing certain types or degrees of contamination, or which have certain physical or historical use characteristics thereby allowing a reasonable degree of definition. These areas include an oily filter cake disposal area; two former sludge lagoon areas; a former drum storage area; a former landfarm area; the former processing facility/tank farm area; ground water and surface waters.

This Record Of Decision will summarize the results of a Focused Feasibility Study which addresses the former processing facility/tank farm area, and will present a remedy for this operable unit. Other aspects of the site will be addressed in subsequent Records Of Decision which will be based upon a comprehensive RI/FS presently being completed.

Site Location and Description

The Douglassville Disposal site occupies approximately 50 acres of land in Union Township, southeastern Berks County, Pennsylvania, along the southern bank of the Schuylkill River (Figure 1). State Route 724 borders the southern edge of the site, and a Penn Central/Conrail Railroad right-of-way extends through the site in an east-west direction (Figure 2). The site is located approximately 3 miles northwest of Pottstown and 11 miles southeast of Reading, Pennsylvania. The site is located almost entirely within the 100-year floodplain of the Schuylkill River.

The area around the site can be described as a rural setting consisting of cropland, uncultivated fields, and light residential and industrial development. Within a 1/4-mile radius of the site there are approximately 23 housing units sheltering an estimated 58 residents. A state adult care facility, the Colonial Manor Adult Home, is located across Highway 724 from the site. The city of Pottstown, approximately 4 miles downstream from the site on the Schuylkill River, has an estimated population of 35,000. The town of Douglassville lies on the northern bank of the river approximately 1/2-mile northeast of the site and has a population of 2,500 people.

The Schuylkill river borders the site to the north and to the east. This stretch of the river lies within the boundaries designated by the Pennsylvania Scenic Rivers Act of 1972 as a component of the Pennsylvania Scenic Rivers System. The river was so designated for the purposes of "conserving and enhancing its scenic quality and of promoting public recreational enjoyment in conjunction with various present and future uses of the river" (PADER, March, 1979). The Schuylkill River is used extensively for municipal and industrial water supply, recreation, and waste assimilation. In the reach extending downstream of the Douglassville Disposal Site to the confluence with the Delaware River, seven public water supply users withdraw water directly from the Schuylkill River. The distance to the nearest public water supply intake is 4 miles at Pottstown.

Geologically, the Douglassville Disposal Site is situated in the Triassic Lowland section of the Piedmont Province. Rock in the general areas of the site is mapped as belonging to the Brunswick Formation which consists of Jurassic-Triassic aged, fine-to-coarse grained sedimentary rocks. The predominant member of the Brunswick Formation consists of red and maroon micaeous, silty mudstones and shales. Structural deformation is not severe. Broad open dips of 25 degrees or less to the north - northwest are prevalent. However, normal faults are common and are located throughout the area. Several fracture traces are located south of the site and it is probable that they project through the site in a 06° NW to 38° NE direction.

Ground water in this formation is controlled by secondary permeability, i.e., water flow takes place along joints, faults, and bedding planes. The Brunswick Formation is generally capable of yielding adequate water for household use. A number of residential wells are located with 1/2 mile of the site. Ground water from the Brunswick Formation is of the calcium carbonate type, ranging from moderately hard to very hard within the general regional area. Total dissolved solids are usually about 300 parts per million. The water table at the site varies from 10 to 20 feet.

The Douglassville Disposal Site was the place of operations of Berks Associates, Inc., since its inception in 1941. The non-operating facility currently consists of a former waste oil processing area located in the southern portion of the site and various areas which were used for waste disposal. The former processing facility/tank farm area consists of an office building, garage, inactive tanks and other processing equipment and a water treatment system with an oil/water separator. A small drainage ditch extends eastward from the oil/water separator in the center of the site and eventually flows into the Schuylkill River. Surface water runoff from the site also feeds into this drainage ditch. A similar drainage swale runs parallel to the ditch and eventually merges with the drainage ditch further east. An old lagoon, identified through historical

BASE MAP IS A PORTION OF THE U.S.G.S. BOYERTOWN, PA QUADRANGLE (7.5 MINUTE SERIES, 1957, PHOTOREVISED 1973). CONTOUR INTERVAL 20'.

FIGURE 1

LOCATION MAP

DOUGLASSVILLE DISPOSAL SITE, UNION TWP., PA

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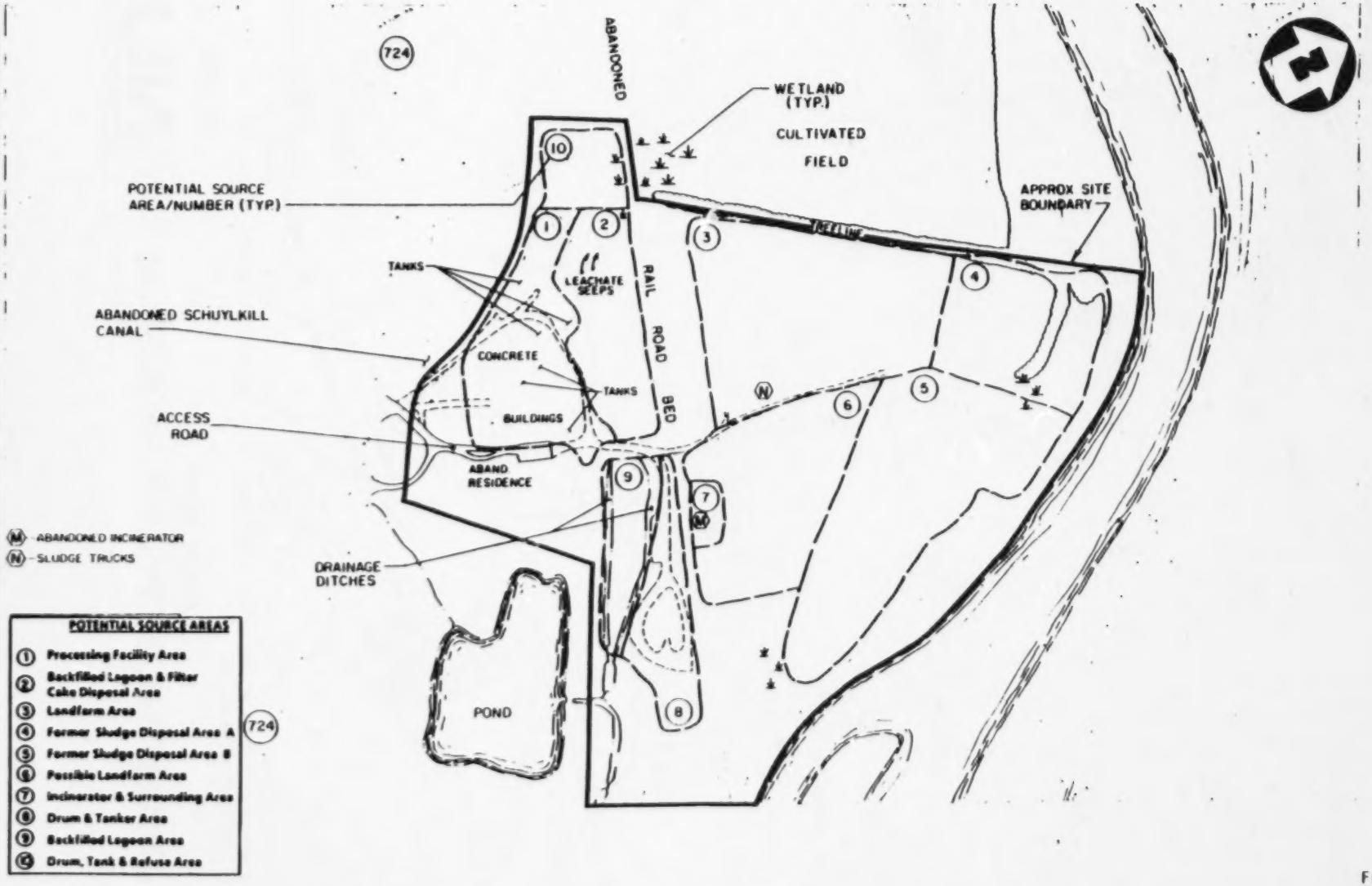


FIGURE

GENERAL SITE FEATURES AND POTENTIAL SOURCE AREAS
DOUGLASSVILLE DISPOSAL SITE, UNION TWP, PA

NUS

aerial photographs, lies between the ditch and the swale. A former drum storage area is located just north of the confluence of the ditch and the swale (Figure 2).

A filter cake disposal area is located just north of the former processing facility/tank farm area. Various trenches and impoundments have been noted on-site. The lagoons formerly used for waste disposal have been backfilled.

An inactive railroad line extends through the site in an east-west direction, and the abandoned Schuylkill Canal borders the southwestern portion of the site.

Site History

In 1941, Berks Associates, Inc., began lubrication oil recycling operations at the site. Site operations also included recycling some waste solvents in the 1950's and 1960's. Wastes generated from the oil recycling and solvent recycling process were stored in several lagoons located in the northern half of the site until 1972. In November of 1970, ten days of heavy rain caused the lagoons to overflow and to breach safety dikes causing a release of 2-3 million gallons of wastes which flowed down the Schuylkill River.

The dikes were repaired pursuant to the provisions of a consent order entered into between Berks Associates, Inc., and the United States. That order also prohibited Berks Associates from storing waste materials in the lagoons. Federal and State actions were initiated to dispose of the waste material remaining in the lagoons. Before this action could be carried out, the heavy rains of Hurricane Agnes caused the Schuylkill River to overflow its banks and inundate the entire site area in June of 1972. An estimated 6-8 million gallons of wastes were released and carried by floodwaters downstream for about 15 miles. During cleanup after the storm, the lagoons were drained and backfilled by EPA.

Berks Associates, Inc., continued lubrication oil recycling operations until 1979 when the operator determined that operational corrections mandated by the Pennsylvania Department of Environmental Resources (PADER) were cost-prohibitive. Operations then turned to the practice of refining waste oils for use as fuel in industrial boilers. Beginning in 1979, oily waste sludge from the new recycling process was landfarmed in the area of the old western lagoon. This practice was halted in 1981 when PADER mandated operational corrections to the landfarming practices.

Results of an EPA Region III Site Investigation in April, 1982 showed volatile organic contaminants in the drinking water well which was utilized by workers at the facility. During

the Site Investigation the Schuylkill River (upstream and downstream of the site), the facility discharge, the drainage swale sediment, and a domestic well (upgradient from the site) were also sampled.

Based on the results of the Site Investigation the site received a Hazard Ranking System (HRS) Score of 55.18. The Douglassville Disposal Site was proposed for inclusion on the National Priorities List in December, 1982. The site was promulgated on the National Priorities List in September, 1983.

A Phase I Remedial Investigation/Feasibility Study (RI/FS) was conducted by EPA in 1984-85. That RI/FS did not include the processing facility/tank farm area which was still in operation at the time. A Record of Decision was signed in September, 1985 recommending containment of wastes in the area addressed by the Phase I RI/FS. That Record of Decision deferred the consideration of resolutions for ground water contamination to future RODs.

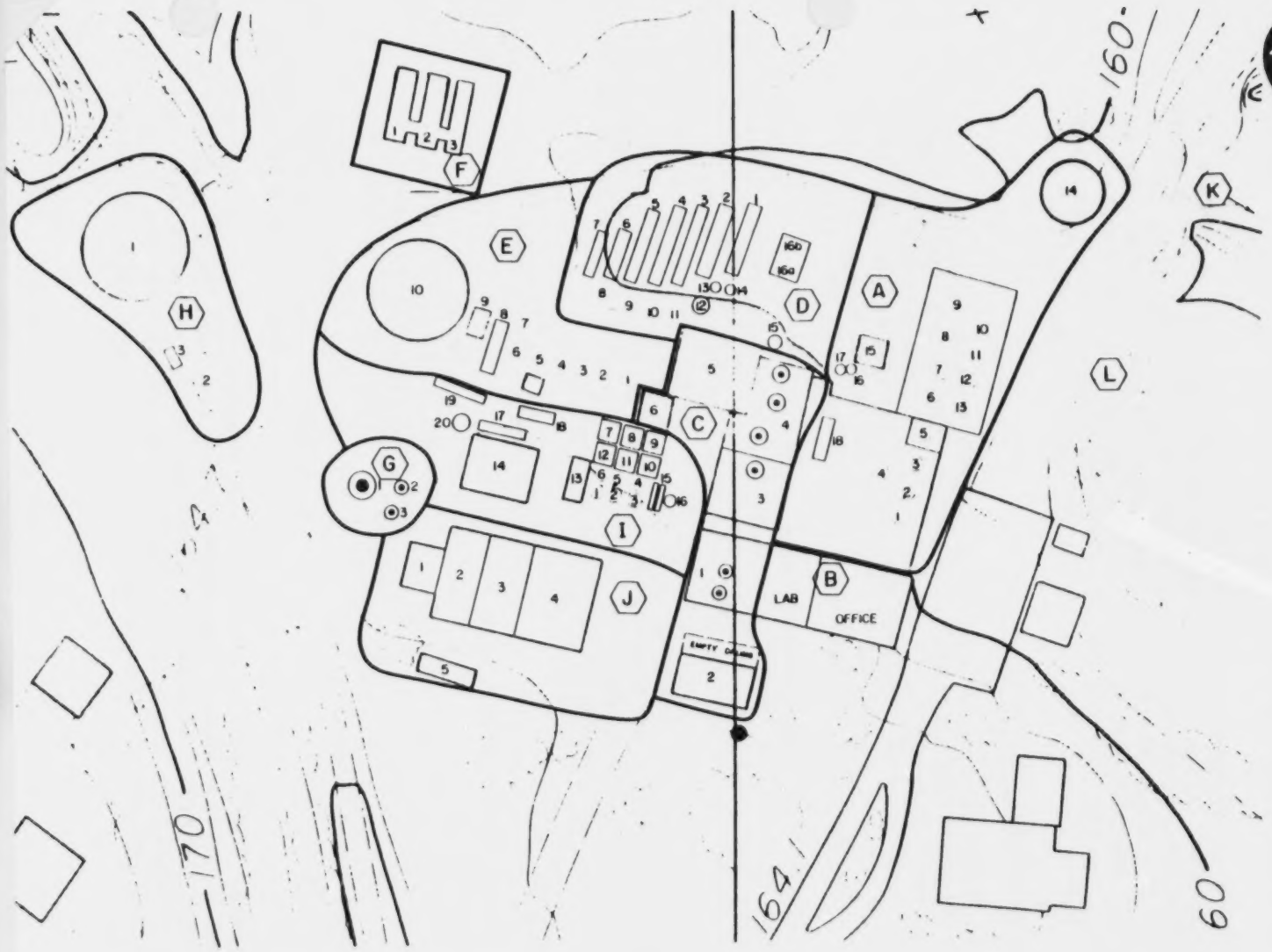
In late 1985 all oil recycling operations at the facility were completely discontinued. In April 1988, EPA completed a Focused Feasibility Study (FFS) to specifically address the contamination at, and the remedial alternatives for, the former processing facility/tank farm portion of the site. EPA is presently completing a comprehensive Phase II RI/FS which will address all aspects of the contamination at the Douglassville Disposal Site.

Scope and Role of the Operable Unit

This Record of Decision addresses the former processing facility/tank farm area and incidental tanks and vehicles as an operable unit pursuant to EPA's April, 1988 FFS. The 3-4 acre area is located in the southernmost portion of the site and is hydraulically upgradient of the rest of the site (Figure 3). The area consists of concrete buildings, process equipment, piping and tanks that were used for oil recycling operations. At least 57 process tanks, both in and above ground, have been inventoried. These tanks are constructed of wood, concrete or steel and range in size from 3,000 gallons to 600,000 gallons. Approximately 200,000 gallons of PCB and lead-contaminated oil and sludge wastes remain in the tanks. The buildings, tanks, tank wastes and processing equipment stand as impediments to any soil and ground water remediation which might be desired in the future, and as a source of continuing contamination of these media.

Summary of Operable Unit Risks

The former processing facility/tank farm area is one of the most contaminated portions of the site. Soils have received more than 40 years of spills from the oil and solvent reclaiming processes which operated at the site. This pollution of the soil apparently extends to the water table. Ground water under the



AREA	DESCRIPTION
A	STORAGE TANKS
B	LABORATORY & OFFICE BUILDING
C	PROCESS BUILDING & EQUIPMENT
D	STORAGE TANKS
E	PROCESS TANKS
F	STORAGE TANKS
G	PROCESS HEATERS
H	STORAGE TANK
I	PROCESS TANKS
J	BUILDINGS
K	TRUCK GARAGE
L	TREATMENT PLANT

LEGEND

TANK OR EQUIPMENT

PROCESS EQUIPMENT

NOTE: SEE APPENDIX A FOR DESCRIPTION OF EQUIPMENT

FIGURE 3

IDENTIFICATION OF AREAS AND COMPONENTS SURVEYED AT THE PROCESSING FACILITY
DOUGLASSVILLE DISPOSAL SITE, UNION TWP, PA

0 50 100
SCALE IN FEET

NUS CORPORATION

area is grossly contaminated. Physically, the various structures and tanks in the area are in a dilapidated condition and continue to deteriorate presenting a potential hazard should they collapse. Also, because much of the 200,000 gallons of wastes exhibit low flashpoints or are combustible, a fire or tank explosion could result in a release of hazardous substances to the environment. This would further contaminate soils and would contribute additional burdens of contamination to ground and surface waters as well as dispersing hazardous substances into the air.

The site access is unrestricted and there is a danger of direct contact with lead and PCB-contaminated oils and sludges by persons who might enter the area. Wastes remaining in the tanks in the area of the operable unit display flashpoints as low as 97 degrees and heating values ranging to 19,700 Btu/lb (Table 1). Lead concentrations were detected as high as 15,800 mg/Kg (Table 2) and PCB levels range to 6,400 mg/Kg (Table 3).

Description of Alternatives

The major objectives of this operable unit include: (1) minimize direct contact with contaminated oil sludge wastes; (2) eliminate the various threats to public health and the environment posed by the combustible wastes remaining in the tanks; (3) eliminate the buildings and tanks as impediments to future remediation of soils and ground water underlying the area.

Based on the above objectives, a number of control technologies were screened to provide a limited number of technologies applicable for remedial actions relevant to the operable unit. Some of these technologies were removed from further consideration based on site-specific constructability, time requirements to achieve cleanup, and physical and chemical suitability. The candidate technologies that were dismissed from retention are presented below with a summary of the justification for elimination. (An expanded discussion is in the FFS report.)

Technology	Reason(s) for Elimination
- Solidification of Tank Wastes	The volume and toxicity of wastes would not be reduced. The high organic content of the wastes makes permanent solidification questionable.
- On-site Biodegradation of Tank Wastes	Degradation of PAHs and PCBs is suspect. Lead concentrations would not be reduced.

Because EPA's April, 1988 Focused Feasibility Study is concerned with the former processing facility/tank farm operable unit, remedy considerations are limited to the operable unit and are not intended to constitute remedial alternatives for the site in its entirety. The alternatives that have been retained

TABLE 1

PHYSICAL CHARACTERISTICS OF TANK WASTE
DOUGLASSVILLE DISPOSAL SITE *

Parameter	Oil-E10, F1, F2, F3	Sludge-E10 F1, F2, F3	Oil- E1-E9	Sludge-E1 E9	Oil-D2, D4-D13	Sludge D14, H1, H2	Sludge-H1
Flashpoint (°F)	205	135	>215	>160	>215	>150	>150
Melting Point (°C)	-40	-50	-60	-65	-60	NA	-75
Boiling Range (°C)	84->200	45->200	64 >200	84->200	51->200	100->200	37 >200
Viscosity (cST)	28.6	>2,100	40.8	>2,100	16.8	NA	>2,100
Heating Value (BTU/lb)	19,700	12,100	18,900	12,000	19,200	6,100	7,900
Total Chlorine (mg/kg)	2,570	12,300	1,370	10,100	1,430	370	64,400
Sulfur (% by wt.)	0.43	0.52	0.45	0.67	0.48	0.31	0.51
Moisture (%)	9.8	25.8	6.5	28.3	19.7	20.7	41.4
Ash (% by wt.)	<0.1	9.7	<0.1	5.6	<0.1	43.0	18.0
Specific Gravity	0.89	1.08	0.89	1.02	0.89	1.27	1.19

* The designations F3, D4, etc. refer to sampling locations as shown on Figure 3.

TABLE 1
PHYSICAL CHARACTERISTICS OF TANK WASTE
DOUGLASSVILLE DISPOSAL SITE
PAGE TWO

Parameter	Sludge-A5, A14	Solvent-A13, D1	Sludge-M3	Oil-11, 12, 14 112	Oil Area 1 Pipe Trenches	Oil Tanker Trucks
Flashpoint (°F)	138	97	>200	>190	>160	200
Melting Point (°C)	-85	NA	-50	-55	-55	-65
Boiling Range (°C)	84->200	NA	49->200	61-150	65-120	61->200
Viscosity (cST)	>2,100	2.34	406	65.5	1,550	44.4
Heating Value (BTU/lb)	12,000	NA	18,100	17,700	5,100	19,100
Total Chlorine (mg/kg)	8,670	NA	5,000	1,110	961	2,520
Sulfur (% by wt.)	0.60	NA	0.46	0.39	0.29	0.46
Moisture (%)	55.1	NA	3.2	17.2	50.4	6.7
Ash (% by wt.)	10.7	NA	3.4	0.8	2.0	0.9
Specific Gravity	1.08	0.86	0.93	0.90	0.99	0.90

NA: Not analyzed

TABLE 2

METAL CONCENTRATIONS (mg/kg)
FACILITY AT DOUGLASSVILLE DISPOSAL SITE *

Parameter	Oil-E10, F1, F2, F3	Sludge-E10, F1, F2, F3	Oil E1-E9	Sludge E1-E9	Oil D2, D4-D11	Sludge D14, M1, M2
Aluminum	--	514	87	421		9,700
Antimony	--	14		45	11	25
Arsenic	--	27	--	2.6		5.6
Barium	174	2,260	76	550	115	819
Beryllium	--	--	--	--	--	
Cadmium	--	7.8	--	12	--	7.0
Calcium	--	1,780	--	4,860	--	14,500
Chromium	4.9	56	--	97	--	--
Cobalt	--	--	--	--	--	--
Copper	14	276	71	872	19	240
Iron	329	5,720	263	3,330	174	7,550
Lead	1,680	9,240	785	15,800	943	812
Magnesium	--	--	--	1,500	--	3,830
Manganese	3.0	50	12	144	3.7	186
Mercury	0.1	2.3	--	0.7	0.1	0.1
Nickel	--	48	--	22	--	11
Potassium	--	--	--			
Selenium	--	3.0	--	0.9	--	
Silver	--	--		14	--	--
Sodium		1,510	--	2,390		1,600
Thallium		30		17		
Vanadium		--			9.7	
Zinc	197	1,500	148	2,530	146	1,280

* The designations F3, D4, etc. refer to sampling locations as shown on Figure 3.

TABLE 2
METAL CONCENTRATIONS (mg/kg)
FACILITY AT DOUGLASSVILLE DISPOSAL SITE
PAGE TWO

Parameter	Sludge-H1	Sludge-A5, A14	Sludge-M3	Oil-11, 12, 14-112	Oil-Area 1 Pipe Trenches	Oil Tanker Trucks
Aluminum	1,910	906	2,550	441	75	
Antimony	72	92	17	--	--	--
Arsenic	7.9	6.6	2.2	--	--	--
Barium	1,860	4,310	603	352	105	278
Beryllium	--	--	--	--	--	-
Cadmium	29	15	1.0	1.7	--	1.9
Calcium	8,390	3,060	3,610		--	-
Chromium	521	77	32		--	10
Cobalt	54	14		--		
Copper	3,680	1,400	198	36	34	81
Iron	23,600	16,400	10,400	586	264	523
Lead	12,600	8,610	12,000	662	781	972
Magnesium	1,730	--	--	--	--	--
Manganese	294	119	120	17	7.4	12
Mercury	1.7	0.4	0.5	0.3	0.2	0.1
Nickel	193	28	39	--	--	--
Potassium	--	--	--	--		
Selenium	1.6	-	--	--	--	-
Silver	15	5.2	--	--	--	-
Sodium	1,460	2,940	4,970	--	--	--
Thallium	--	--	--	--	--	
Vanadium	-	-	--	--	--	--
Zinc	3,410	6,880	1,810	294	102	614

TABLE 3

PCB CONCENTRATIONS
FACILITY AT DOUGLASSVILLE DISPOSAL SITE *

Sample	PCB-1260 (mg/kg)
Oil-E10, F1, F2, F3	17
Sludge-E10, F1, F2, F3	500
Oil-E1-E9	1.5
Sludge-E1-E9	68
Oil-D2, D4-D13	9
Sludge-D14, N1, N2	51
Sludge-H1	6,400
Sludge-A5, A14	56
Solvent-A13, D1	--
Sludge-M3	140
Oil-I1, I2, I4-I12	32
Oil-Area I pipe trenches	2
Oil-Tanker trucks (K1-K3)	17
Concrete Floor - Bldgs. C3-C6	180
Concrete Floor - Bldgs. C3-C6	27
Concrete Floor - Bldgs. C3-C6	35
Concrete Floor - Bldgs. C3-C6	82
Process Equipment - Bldg. C5, C6	69
Process Equipment - Bldg. C5, C6	18
Concrete Floor-Area I	11
Concrete Floor-Area I	46

* The designations F3, D4, etc refer to sampling locations as shown on Figure 3.

for further analysis for the operable unit are summarized as follows:

- No Action

- Tank waste removal with on-site incineration of the tank wastes, and facility dismantling with off-site disposal of decontaminated and uncontaminated tanks and rubble.

- Tank waste removal with off-site incineration of tank wastes, and facility dismantling with off-site disposal of decontaminated and uncontaminated tanks and rubble.

To analyze these alternatives, an evaluation was conducted that considered the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (P.L. 96-510) as amended by The Superfund Amendments and Reauthorization Act of 1986 (P.L. 99-499), and the current version of the National Contingency Plan (NCP) (40 CFR Part 300). To facilitate a comparative analysis of the three alternatives and to provide the rationale for the selection of the remedy for the operable unit in compliance with Section 121 of SARA, nine criteria were considered. These criteria are:

1. Short-term effectiveness;
2. Long-term effectiveness and permanence;
3. Reduction of toxicity, mobility, and volume;
4. Implementability;
5. Compliance with Applicable or Relevant and Appropriate Requirements (ARARs);
6. Overall protection of human health and the environment;
7. State acceptance;
8. Community acceptance;
9. Cost.

A detailed evaluation of the alternatives is presented in Section 4 of EPA's April, 1988 Focused Feasibility Study. The following is a narrative summary of the evaluation:

Remedial Alternative 1: No Action

The NCP requires that the No Action alternative be considered. This alternative will not be effective in reducing the present risks to human health and the environment posed by the former processing facility/tank farm. The overall protection of human health and the environment will decrease with time as the facility continues to deteriorate. Toxicity, mobility, and volume of hazardous substances will not be reduced. Implementation of the No Action alternative would inhibit the remediation of contaminat soils and ground water underlying the area as a part of the overa site remediation.

It is unlikely that the Commonwealth of Pennsylvania or the local citizenry would accept No Action at the facility.

This alternative does not have any capital expenditures or operation and maintenance costs.

Remedial Alternative 2: Tank Waste Removal and On-site Incineration; Facility Dismantling with Off-site Disposal

This alternative involves on-site incineration of the tank wastes and dismantling and decontamination of tanks, equipment, and buildings. Decontaminated tanks would be scrapped. Decontaminated building materials would be disposed of in an off-site landfill for non-hazardous waste. There may be a small amount of material that cannot be decontaminated. Such material will be disposed of in an off-site landfill for hazardous waste. (A more detailed description can be found in Section 3 of the April, 1988 Focused Feasibility Study.)

- Short-Term Effectiveness

  This alternative would reduce the immediate risks posed by the site. Dust and other air emissions may result from material handling, dismantling, decontamination, and on-site incineration activities. Dust controls and incinerator air pollution controls will be required.

  Air monitoring will be performed to protect the community from adverse air emissions. Air monitoring will be performed in work areas. The following residuals will be generated: incinerator ash, wastewater from air pollution controls, and decontamination fluids. Ash will be drummed and stored on-site to be remediated with the other source areas at a later date. Wastewater will be temporarily stored on-site pending laboratory analysis to determine disposal requirements.

- Long-Term Effectiveness and Permanence

  Incineration is a demonstrated treatment process for the destruction of PCBs and other organic compounds. There will be no remaining risks associated with the former processing facility/tank farm because it will be completely removed. Residual ash will be temporarily stored on-site in a fenced, secure area. These actions will mitigate any remaining direct contact risks. No long-term management or operation and maintenance are required, because the facility will be completely removed. It is estimated that this alternative can be completed in 3-6 months following the initiation of on-site activities.

  Implementation of this alternative will allow access to soils beneath the facility in order to investigate and remediate contamination.

- Reduction of Toxicity, Mobility, and Volume

Incineration will destroy almost all of the organic constituents in the waste, including PCBs. The treatment is irreversible. Toxicity, mobility, and volume will all be reduced. Volume reduction of tank waste is expected to be approximately 85 to 90 percent.

- Implementability

The technologies proposed for facility removal, dismantling, incineration, and off-site landfilling are all demonstrated and commercially available. Several mobile incinerators have permits for incinerating PCBs. This alternative should not adversely affect other source areas at the site nor interfere with future remedial actions for these areas. There would be no need to monitor the effectiveness of the remedy, because the former processing facility/tank farm would be completely removed.

There may be some question concerning the availability of mobile incinerators at this time. This problem is, however, not considered to be insurmountable and is not expected to prevent implementation of this alternative.

- Compliance with ARARs

Removal of the wastes from the facility tanks would comply with the intent of the closure requirements of RCRA Subtitle C regulations found at 40 CFR Section 264.197 regarding closure of tank systems. On-site incineration of the tank wastes would address 40 CFR Section 264.340 et. seq. promulgated under RCRA, and of 40 CFR Part 761 promulgated under the Toxic Substances Control Act (TOSCA). Lead emissions from on-site incineration would comply with the National Ambient Air Quality Standards and the Pennsylvania Department of Environmental Resources lead concentrations standard, both of which are 1.5 ug/m^3 quarterly average. The remedial action would also comply with the land disposal restrictions designated at 40 CFR Part 268.

- Overall Protection of Human Health and the Environment

Facility contaminants and hazardous materials would be completely removed from the facility. This will eliminate the risks from collapse, fire, and direct contact with hazardous materials associated with the facility. The ash resulting from on-site waste incineration would be temporarily stored in drums in a secure area and would be handled as a part of the overall site remediation.

- State Acceptance

The Commonwealth of Pennsylvania would probably find this alternative to be acceptable.

- Community Acceptance

Community interest in the site has been low. It is probable that this alternative would be acceptable to the community.

- Cost

The capital cost estimate for this alternative is $3,897,000. No operation and maintenance costs would be incurred, because this is a permanent remedy. Additional costs would be incurred in the future to remediate the remaining ash residue.

REMEDIAL ALTERNATIVE 3 - TANK WASTE REMOVAL WITH OFF-SITE INCINERATION; FACILITY DISMANTLING WITH OFF-SITE DISPOSAL

This alternative involves off-site incineration of the tank wastes and dismantling and decontamination of tanks, equipment, and buildings. Decontaminated building materials would be disposed in an off-site landfill for non-hazardous waste. There may be a small amount of material that cannot be decontaminated. Such material will be disposed in an off-site landfill for hazardous waste. (A more detailed description can be found in Section 3 of the April, 1988 Focused Feasibility Study.)

- Short Term Effectiveness

This alternative would reduce the immediate risks posed by the facility. Dust and other air emissions may result from material handling, dismantling, and decontamination activities. Dust controls will be required, and air monitoring will be performed to protect the community from adverse air emissions. Air monitoring will be performed in work areas.

- Long-Term Effectiveness and Permanence

Incineration is a demonstrated treatment process for the destruction of PCBs and other organic compounds. There will be no remaining risks associated with the processing facility, because it will be completely removed.

No long-term management or operation and maintenance are required, because the facility will be completely removed.

Implementation of this alternative will allow access to soils beneath the facility in order to investigate potential contamination. It is estimated that this alternative can be completed in 3-6 months following the initiation of on-site activities.

- Reduction of Toxicity, Mobility, and Volume

Incineration will destroy almost all of the organic constituents in the waste, including PCBs. The treatment is irreversible. Toxicity, mobility, and volume will all be reduced. Expected volume reduction of tank waste is approximately 85 to 90 percent.

- Implementability

The technologies for facility removal, dismantling, incineration, and offsite landfilling are all demonstrated and commercially available. Several off-site incinerators have permits for incinerating PCBs. This alternative should not adversely affect other source areas at the site or interfere with future remedial actions for these areas. There would be no need to monitor the effectiveness of the remedy, because the facility would be completely removed.

- Compliance with ARARs

Removal of the wastes from the tanks would comply with the intent of the requirements of RCRA Subtitle C regulations (regarding closure of tank systems) found at 40 CFR Section 264.197. Transportation of the tank wastes to a commercial hazardous waste incinerator would be done in compliance with standards applicable to generators of hazardous waste promulgated under RCRA and found at 40 CFR Section 262.10 et. seq.; the 25 PA Code Chapter 75 regulations governing the generation and transportation of hazardous wastes; United States Department of Transportation and Pennsylvania Department of Transportation regulations pertaining to the transportation of hazardous materials; and TOSCA regulations found at 40 CFR Part 761 regarding the transportation of PCBs. Materials designated for reuse will be decontaminated as specified at 40 CFR Section 761.125(c)(3)(iv). In addition, the receiving facility would be required to be in compliance with applicable state and Federal permit requirements relevant to hazardous waste treatment facilities. The remedial action would also comply with the land disposal restrictions designated at 40 CFR Part 268.

- Overall Protection of Human Health and the Environment

Facility contaminants and hazardous materials will be completely removed from the facility. This will eliminate the risks from collapse, fire, and direct contact with hazardous materials associated with the facility.

- State Acceptance

The Commonwealth of Pennsylvania has expressed its acceptance of this alternative. A letter addressing that acceptance has been received by EPA.

- Community Acceptance

Community interest in the site has been low. No comments were received regarding this alternative as published in the Pottstown "Mercury" in the form of a Proposed Plan.

- Cost

The capital cost estimate for this alternative is $4,050,000. No operation and maintenance costs will be incurred, because this is a permanent remedy.

Comparative Analysis

No environmental nor public health benefits would result from implementing Alternative 1, No Action. This alternative would not satisfy the requirement that remedial actions must be protective of public health and the environment.

Alternatives 2 and 3 would result in conditions which are protective of public health and the environment. Both alternatives would result in the total removal of the former processing facility/tank farm as a potential threat to human health and the environment and are similiar when comparing against implementability, short-term effectiveness, and the reductions of mobility, toxicity, and volume. The cost of Alternative 2 (on-site incineration of tank wastes) is estimated to be only $153,000 less than the cost of implementing Alternative 3 (off-site incineration of tank wastes). However, Alternative 2 would result in the leaving of at least 300 drums of lead-contaminated incinerator ash stored on-site for an indefinite time period pending remediation with other source areas. The cost for this future treatment is unknown at this time.

Recommended Alternative

Section 121 of SARA and the National Contingency Plan (NCP) establish a variety of requirements relating to the selection of remedial actions under CERCLA. Having applied the current evaluation criteria to the three remaining remedial alternatives, we recommend that Alternative 3 be implemented at the Douglassville Disposal Site former processing facility/tank farm.

This is an operable unit remedy for the site and as such, does not attempt to ensure compliance with all ARARs for the entire site. It will be consistent, however, with those action-specific ARARs addressing the closure of hazardous waste tank systems and transportation of hazardous wastes. This operable unit remedy will not be inconsistent with a final comprehensive remedy for the site.

This alternative consists of removing the wastes from the on-site tanks and transporting those wastes to a permitted off-site facility for incineration. The incineration residuals will become the responsibility of the incineration facility and will be disposed of as required by the facility's operating permits. Tanks, piping, processing equipment, and building materials designated for salvage or reuse will be decontaminated as necessary to a level not to exceed 100ug/100cm^2 PCBs on the surface as determined by wipe sampling. Decontaminated building rubble will be disposed of in permitted off-site sanitary or demolition debris landfills. Tanks and other metal materials will be sold as scrap. Concrete, asphalt and other materials which contain PCBs and which cannot be decontaminated to less than 50 ppm PCBs will be disposed of at a permitted off-site hazardous waste landfill. Decontamination fluids generated during the operation will be treated appropriately depending upon the type and degree of contamination. Typical scenarios include dewatering and incineration, and treatment by a hazardous waste treatment facility.

Excavations created during the extractions of below-ground tanks and piping will be backfilled with fill graded from the area or otherwise backfilled to eliminate physical endangerment pending decisions on soil remediation for the area.

Statutory Findings

The selected remedy is protective of human health and the environment, attains all applicable, or relevant and appropriate requirements for this operable unit, and is cost effective. The selected remedy provides the best balance among the evaluation criteria by achieving a long-term effective and permanent remedy with no long-term management for this operable unit (i.e., residuals would not be temporarily stored on-site). The remedy utilizes alternative treatment technologies or resource recovery options to the maximum extent practicable. The remedy also satisfies the preference for treatment by reducing the toxicity, mobility or volume of the hazardous substances.

Schedule

It is expected that a design contract will be awarded in the summer of 1988 and that the design can be completed in 10 months. Actual remedial activities are expected to require 3 to 6 months for implementation.

Douglassville Responsiveness Summary

On Sunday May 8, 1988, The Pottstown Mercury ran an EPA advertisement announcing the preferred cleanup alternative for the Douglassville Superfund Site. The comment period, May 8, 1988 to June 6, 1988 was also announced in the ad. We stated that if a public meeting was requested, residents should contact EPA, and a contact number was given. A copy of the ad is attached.

During that time period, EPA Region III received no requests for a public meeting, and no comments on the proposed alternatives. We telephoned the Union Township Building to inform them of the alternative before the ad was published. One news editorial in the Pottstown Mercury commended EPA on the announcement.

Throughout the Superfund process, EPA never received more than one or two comments from Douglassville residents regarding the site. However, during this past comment period, no comments were received.

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ENVIRONMENTAL PROTECTION AGENCY
REGION 111

841 Chestnut Building
Philadelphia, Pennsylvania 19107

The United States Environmental Protection Agency (EPA) has completed a Feasibility Study which focused on the former processing area and tank farm at the Douglassville Superfund Site on Route 724 in Douglassville, where the former Berks Associates Inc. Oil Recycling facility operated from approximately 1941 to 1985.

Listed below are the cleanup alternatives:

1. No action
2. Facility Dismantlement with On-Site Incineration of Tank Contents.
3. Facility Dismantlement with Off-Site Incineration of Tank Contents.

EPA's preferred cleanup method is alternative #3: Facility Dismantlement with Off-Site Incineration of Tank Contents.

Under this alternative the contents of the tanks would be removed incinerated at a permitted hazardous waste treatment facility off site. The tanks, buildings and equipment would be dedcontaminated; the entire former processing facility tank farm area would be dismantled; and the decontaminated rubble would be landfilled at a permitted facility off site. These actions would eliminate the risks from collapse, fire, and direct contact with hazardous substances presently associated with the facility. The ash residue produced from the site incineration would be the responsibility of the incineration facility. The capitol cost of this alternative is estimated to be approximately $4,050,000.

Before the cleanup method becomes final, EPA is accepting comments from the public on the preferred alternative. The public comment period begins Sunday May 8, 1988 and ends Monday June 6, 1988.

Please send all written comments to:

Nanci Sinclair (3PA00)
U.S. EPA
841 Chestnut Street
Philadelphia, PA 19107

Victor Janosik
U.S. EPA
841 Chestnut Street
Philadelphia, PA 19107

If a public meeting is requested, please contact Nanci Sinclair at (215) 597-4164 by May 22.

All reports and documents regarding the Douglassville disposal Superfund Site are available for public review at the local repository which is located at:

Union Township Municipal Building
RD #1 Box 292 (Center Road)
Douglassville, PA 19518

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
Post Office Box 2063
Harrisburg, Pennsylvania 17120

Deputy Secretary for
Environmental Protection

June 23, 1988

Mr. Stephen R. Wassersug, Director
Hazardous Waste Management Division (3HW00)
US EPA, Region III
841 Chestnut Building
Philadelphia, PA 19107

Dear Mr. Wassersug:

The draft Record of Decision for an interim remedial action addressing the former processing facility/tank farm operable unit at the Douglasville Disposal Superfund Site has been reviewed by DER staff members. The Department concurs with EPA's assessment of the selected interim remedial action.

The selected interim remedial action consists of:

1. Removal of the liquids and sludges remaining in the tanks of the former processing facility.
2. Removal of liquids and sludges from incidental tanks and trucks on other portions of the facility.
3. Transporting these liquids and sludges to an offsite facility for incineration.
4. Decontamination of tanks, piping, and structures.
5. Dismantlement of the entire former processing facility.
6. Disposal of the uncontaminated tanks by sale as scrap.
7. Disposal of the uncontaminated rubble in an off-site disposal facility.
8. Disposal of rubble which cannot be satisfactorily decontaminated in an off-site permitted hazardous waste disposal facility.

Upon completion of the comprehensive Phase II Remedial Investigation/Feasibility Study (Phase II RI/FS) which will address all aspects of the contamination at the site and the selection of a final remedial action, another Record of Decision will be required.

I wish to thank you and your staff for your cooperation with the Department. Again this concurrence demonstrates our spirit of commitment to continue to protect our environment.

Very truly yours,

Mark M. McClellan
Deputy Secretary
Environmental Protection
Department of Environmental Resources

cc: Mr. McClellan
Mr. Boardman
Mr. Snyder
Ms. Hofman
Mr. Becker
Mr. Lynn
Attorney Calder
Attorney Brennan
Ms. Dekona
Mr. Klinikowski
Mr. Voltaggio (EPA)
Mr. Graham (EPA)
Mr. Janosik (EPA)
File
Chron.

RMB:JPS:BH:DMB:jcb

DOUGLASSVILLE DISPOSAL SITE - PHASE I*
ADMINISTRATIVE RECORD** ***
INDEX OF DOCUMENTS

SITE IDENTIFICATION
Notification/Site Discovery

1) Potential Hazardous Waste Site Identification, 10/21/80. P. 1-1.

2) Notification of Hazardous Waste Site, 6/81. P. 2-2.

Preliminary Assessment/Site Investigation Reports

1) Potential Hazardous Waste Site Identification and Preliminary Assessment, 9/9/81. P. 1-5.

2) Potential Hazardous Waste Site Identification and Preliminary Assessment, 3/5/82. P. 6-12.

3) Potential Hazardous Waste Site Identification and Preliminary Assessment, 5/6/82. P. 13-22.

4) Report: A Site Inspection of Berks Associates, prepared under TDD No. F3-8303-02, prepared by Mr. David A. Nickerson and Mr. Joseph G. McGovern, Ecology and Environment, Inc., 8/3/82. P. 23-118.

5) Report: Field Trip Summary Report (no author cited), (undated). P. 119-121.

Correspondence

1) Letter to Mr. Michael Steiner, Pennsylvania Department of Environmental Resources, from Ms. Kathryn Hodgkiss, U.S. EPA, re: transmittal of the Site Inspection Report for the Berks Associates Site, 8/15/83. P. 1-1.

2) Letter to Mr. Bruce Beitler, Pennsylvania Department of Environmental Resources, from Ms. Kathryn Hodgkiss, U.S. EPA, re: transmittal of the Site Inspection Report for the Berks Associates Site, 8/15/83. P. 2-2.

* For further documentation on this site, please refer to the Phase II administrative record.

** Administrative record available 3/21/88, updated 4/5/88.

*** Supporting Sampling Data is stored at the Region III Central Regional Laboratory in Annapolis, Maryland.

REMEDIAL ENFORCEMENT PLANNING
Potentially Responsible Party Search Correspondence

1) Letter to Mr. R. L. Noland, Ametek, Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 1-3.

2) Letter to Mr. Walter Williams, Bethlehem Steel Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 4-6.

3) Letter to Mr. Al Cimino from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 7-9.

4) Letter to Mr. William Cox, City Waste Oil Service, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 10-12.

5) Letter to Mr. Clement A. Revelti, Dana Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 13-15.

6) Letter to Ms. Lorraine Szyman, J&L Industries, Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 16-18.

7) Letter to Mr. W. R. Grigsby, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 19-21.

8) Letter to Mr. A. S. Hutchcraft, Jr., Kaiser Aluminum & Chemical Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 22-24.

9) Letter to Mr. John Lavala from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 25-27.

10) Letter to Mr. Joseph Lorenz from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 28-30.

11) Letter to Mr. W. W. Wilson, Lukens, Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 31-33.

12) Letter to Mr. John B. Curcio, Mack Trucks, Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 34-36.

13) Letter to Mr. E. M. Note from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 37-39.

14) Letter to Mr. William Schiavani from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 40-42.

15) Letter to Mr. Leonard Tohanczn from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 43-45.

16) Letter to Mr. Thomas Lewis, Total Recovery, Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 46-48.

17) Letter to Mr. Kevin Donnigan, Thomas & Betts Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 49-51.

18) Letter to Mr. James W. Yerger from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 52-54.

19) Letter to Mr. Lee Walter from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 9/19/85. P. 55-57.

20) Letter to Mr. James H. McNeil, The Budd Company, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 10/11/85. P. 58-60.

21) Letter to Mr. Danial Davall, Midland Ross Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 10/11/85. P. 61-63.

22) Letter to Mr. Thomas H. Cifelli, Wagner Electric Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 10/11/85. P. 64-66.

23) Letter to Mr. Paul R. Wikinson, E. I. DuPont de Nemours, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 11/13/85. P. 67-69.

24) Letter to Mr. John R. Welch, Jr., General Electric Company, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 11/13/85. P. 70-72.

25) Letter to Mr. Frank Umbriac, Hazleton Oil Salvage, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 11/13/85. P. 73-75.

26) Letter to Mr. Stanley Pace, TRW Inc., from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 11/13/85. P. 76-78.

27) Letter to Mr. Joseph Mooney, Monsey Products Company, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, 11/13/85. P. 79-81.

24) Letter to Mr. Bernard Jaffe, Sun Chemical Corporation, from Mr. Stephen R. Wassersug, U.S. EPA, re: 104(e) information request, (undated). P. 82-84.

REMEDIAL RESPONSE PLANNING
Work Plans

1) Report: Remedial Action Master Plan, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 11/83. P. 1-96.

2) Report: Work Plan, Remedial Investigation/Feasibility Study, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 4/84. P. 97-185.

3) Report: Site Operations Plan, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 10/84. P. 186-266.

Remedial Investigation/Feasibility Study Reports

1) Report: Remedial Investigation Report/Feasibility Study of Alternatives, Volume I, Berks Associates, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 6/86. P. 1-376.

2) Report: Remedial Investigation Report/Feasibility Study of Alternatives, Volume II, Appendices A-D, Berks Associates, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 6/86. P. 377-635.

3) Report: Remedial Investigation Report/Feasibility Study of Alternatives, Volume III, Appendices E-F, Berks Associates, Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 6/86. P. 636-876.

Correspondence

1) Letter to Ms. Kathy Hodgkiss, U.S. EPA, from Mr. Michael R. Steiner, Commonwealth of Pennsylvania Department of Environmental Resources, re: comments of the Department of Environmental Resources in regard to the draft work plans, 6/16/83. P. 1-1.

2) Letter to Mr. Michael Steiner, Commonwealth of Pennsylvania Department of Environmental Resources, from Mr. William A. Hagel, U.S. EPA, re: transmittal of the Final Remedial Action Master Plan for the Douglassville Disposal Superfund Site, 2/27/84. P. 2-2.

3) Letter to Mr. Michael Steiner, Commonwealth of Pennsylvania Department of Environmental Resources, from Mr. William A. Hagel, U.S. EPA, re: transmittal of the final Work Plan for Remedial Investigation/ Feasibility Study (RI/FS) for the Douglassville Disposal Superfund Site, 5/4/84. P. 3-3.

4) Letter to Mr. William A. Hagel, U.S. EPA, from Mr. Michael Steiner, Commonwealth of Pennsylvania Department of Environmental Resources, re: approval of the Remedial Investigation/Feasibility Study Work Plan for the Douglassville Disposal Site, 5/29/84. P. 4-4.

5) Letter to Ms. Judy Dorsey, U.S. EPA, from Mr. Marc E. Gold, Wolf, Block, Schorr and Solis-Cohen, re: negotiations with potentially responsible parties, 12/12/85. P. 5-6.

6) Letter to Ms. Judith Dorsey, U.S. EPA, from Mr. Marc E. Gold, Wolf, Block, Schorr and Solis-Cohen, re: alternative clean-up plan for the Berks Associates Site, Douglassville, Pennsylvania, 3/11/86. P. 7-46. A report entitled "Corporate Review and Select Test Data" is attached to the letter.

Record of Decision/Enforcement Decision Document (ROD/EDD)

1) Letter to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. Dwight D. Worley, Commonwealth of Pennsylvania Department of Environmental Resources, re: second Draft of the Record of Decision, Remedial Action Alternative Selection for the Douglassville Disposal Site, 9/24/85. P. 1-2.

2) Record of Decision, Remedial Action Alternative Selection, (undated). P. 3-45.

COMMUNITY INVOLVEMENT
Community Relations Plan

1) Report: Community Relations Plan for Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by NUS Corporation, 12/84. P. 1-23.

Fact Sheets, Press Releases, Public Notices

1) Press Release from U.S. EPA Environmental News entitled "EPA Schedules Public Meeting for Douglassville Superfund Site," 6/21/85. P. 1-1.

2) Press Release from U.S. EPA Environmental News entitled "EPA Approves Cleanup Alternative for Douglassville Disposal Superfund Site," 10/11/85. P. 2-3.

3) Report: Douglassville Disposal Site (no author cited), (undated). P. 4-6.

Meeting Summaries, Trip Reports, Correspondence with Public

1) Memorandum to Mr. D. R. Brenneman from Mr. R. E. Stecik re: public meeting notes, 3/28/84. P. 1-2.

2) Agenda of a public meeting, 7/10/85. P. 3-3.

Interagency Meeting Notes, General Correspondence

1) Letter to Mr. Donald Gutekunst, Union Township Supervisors, from Mr. William A. Hagel, U.S. EPA, re: public review of the draft Work Plan for Remedial Investigation/Feasibility Study for the Douglassville Disposal Site, 3/19/84. P. 1-1.

2) Memorandum to Mr. Thomas C. Voltaggio, U.S. EPA, from Mr. William Hagel, U.S. EPA, re: public meeting on the Douglassville Disposal Site, 4/1/84. P. 2-2.

3) Letter to Mr. William A. Hagel, U.S. EPA, from Mr. Davis L. Allebach, Jr., Reynier, Crocker, Allebach & Reber, P. C., re: well water testing in the area of the Berks Associates property, 6/22/84. P. 3-3.

4) Letter to Mr. Lester Schurr, Berks Associates, Incorporated, from Mr. William A. Hagel, U.S. EPA, re: sampling and drilling at the Berks Associates property, 6/27/84. P. 4-4.

5) Letter to Mr. David L. Allebach, Jr., Reynier, Crocker, Allebach & Reber, P. C., from Mr. William A. Hagel, U.S. EPA, re: EPA's activities at the Berks Associates Site in Douglassville, Pennsylvania, 7/2/84. P. 5-5.

6) Letter to Mr. Donnell Marshall, Laurel Locks Farms, from Mr. Richard L. Zambito, P. E., U.S. EPA, re: installing a monitoring well on the property directly adjacent to the Berks Associates, 8/22/84. P. 6-6.

7) Handwritten letter to Ms. Nanci Sinclair, U.S. EPA, from Mr. Donald Weber re: public meeting at the Douglassville Superfund Site, 7/16/85. P. 7-7.

8) Letter to Mrs. Pat Hobbs from Mr. Bruce P. Smith, U.S. EPA, re: status of of the Berks Associates Site, 3/12/86. P. 8-9.

9) Fact Sheet from U.S. EPA and Pennsylvania Department of Environmental Resources (PADER) entitled "Preferred Remedial Alternative for the Berks Associates, Douglassville Disposal Superfund Site," (undated). P. 10-11.

GENERAL GUIDANCE DOCUMENTS *

1) "Promulgation of Sites from Updates 1-4," Federal Register, dated 6/10/86.

2) "Proposal of update 4," Federal Register, dated 9/18/85.

3) Memorandum to U. S. EPA from Mr. Gene Lucero regarding community relations at Superfund Enforcement sites, dated 8/28/85.

4) Groundwater Contamination and Protection, undated by Mr. Donald V. Feliciano on 8/28/85.

5) Memorandum to Toxic Waste Management Division Directors Regions I-X from Mr. William Hedeman and Mr. Gene Lucero re: Policy on Floodplains and Wetlands Assessments for CERCLA Actions, 8/6/85.

6) Guidance of Remedial Investigations under CERCLA, dated 6/85.

7) Guidance on Feasibility Studies under CERCLA, dated 6/85.

8) "Proposal of Update 3," Federal Register, dated 4/10/85.

9) Memorandum to Mr. Jack McGraw entitled "Community Relations Activites at Superfund Sites - Interim Guidance," dated 3/22/85.

10) "Proposal of Update 2," Federal Register, dated 10/15/84

11) EPA Groundwater Protection Strategy, dated 9/84.

12) Memorandum to U.S. EPA from Mr. William Heckman, Jr. entitled "Transmittal at Superfund Removal Procedures - Revision 2," dated 8/20/84.

13) "Proposal of Update 1," Federal Register, dated 9/8/83.

14) Community Relations in Superfund: A Handbook (interim version), dated 9/83.

15) "Proposal of first National Priority List," Federal Register, dated 12/30/82.

16) "Expanded Eligibility List," Federal Register, dated 7/23/82.

17) "Interim Priorities List," Federal Register, dated 10/23/81.

18) Uncontrolled Hazardous Waste Site Ranking System: A User's Manual (undated).

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20) Field Standard Operating Procedures - Site Safety Plan (undated).

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DOUGLASSVILLE DISPOSAL SITE - PHASE II*
ADMINISTRATIVE RECORD** ***
INDEX OF DOCUMENTS

REMEDIAL RESPONSE PLANNING
Work Plans

1) Report: Final Work Plan, Phase II Remedial Investigation/Feasibility Study, Douglassville Disposal Site, Berks County, Pennsylvania, prepared by NUS Corporation, 8/87. P. 1-183. References are listed on P. 147-148.

2) Letter to Mr. Vic Janosik, U.S. EPA, from Mr. Richard C. Evans, P. E., EBASCO Services Incorporated, re: Douglassville Disposal Site - Phase II Remedial Investigation/Feasibility Study Amendment to Final Work Plan, 8/24/87. P. 184-185.

3) Report: Final Field Operations Plan (FOP), Phase II Remedial Investigation/ Feasibility Study, RI/FS, Douglassville Disposal Site, Union Township, Pennsylvania, prepared by NUS Corporation, 10/87. P. 186-348. References are listed on P. 318.

4) Report: Amendment 1 to Final Field Operations Plan (FOP), Phase II Remedial Investigation/Feasibility Study, Douglassville Disposal Site, Union Township, Pennsylvania, prepared by NUS Corporation, 11/87. P. 349-370.

5) Report: Draft Work Plan, Phase II Remedial Investigation/Feasibility Study, Douglassville Disposal Site, Berks County, Pennsylvania, prepared by EBASCO Services Incorporated, 6/17/87. P. 371-555. References are listed on P. 528-529.

6) Report: Hydrogeologic Investigation, Douglassville Disposal [Site], prepared by NUS Corporation, 2/29/88. P. 556-601. References are listed on P. 586-587.

7) Report: Field Trip Report for Douglassville Disposal Site, prepared by NUS Corporation, 3/17/88. P. 602-670.

8) Report: Final Focused Feasibility Study/Facility Removal, Douglassville Disposal Site, Berks County, Pennsylvania, prepared by NUS Corporation, 4/88. P. 671-781. References are listed on P. 747.

9) Report: Superfund Program Fact Sheet/Proposed Remedial Action Plan, Douglassville Disposal Site, Douglassville, Pennsylvania, prepared by EPA, Region III, 5/4/88. P. 782-786.

* For further documentation on this site, please refer to the Phase I administrative record.

** Administrative record available 3/21/88, updated 5/6/88.

*** Supporting Sampling Data is stored at the Region III Central Regional Laboratory.

Correspondence

1) Memorandum to the file from Mr. E. Sonnenberg and Mr. M. Hlavacik, NUS Corporation, re: facility dismantling and disposal, and additional surface capping in drainage ditch area, 8/19/85. P. 1-6. A table regarding estimated cost summary and a site map are attached to the memorandum.

2) Memorandum to the file from Mr. E. Sonnenberg, NUS Corporation, re: quantities and costs estimates [sic] for additional excavating in the drainage ditch area, 8/30/85. P. 7-11. Three standard calculation sheets are attached to the memorandum.

3) Memorandum to the file from Mr. E. Sonnenberg, NUS Corporation, re: cost estimates for Alternative No. 4, 9/5/85. P. 12-14. Two tables regarding backup cost estimates are attached to the memorandum.

4) Memorandum to the file from Mr. E. Sonnenberg, NUS Corporation, re: additional costs to Feasibility Study Alternatives 2-9 due to additional excavation in drainage ditch area, 9/9/85. P. 15-28. Data regarding backup cost estimates are attached to the memorandum.

5) Memorandum to the file from Mr. Erich Sonnenberg, NUS Corporation, re: leachate production estimates, 9/12/85. P. 29-39. Data regarding leachate production estimates are attached to the memorandum.

6) Memorandum to the file from Mr. Erich Sonnenberg, NUS Corporation, re: design considerations in the event of a 500-year flood, 10/3/85. P. 40-43. Calculations regarding 500-year flood protection design are attached to the memorandum.

7) Letter to Ms. Judy Dorsey, U.S. EPA, from Mr. Marc E. Gold, Wolf, Block, Schorr and Solis-Cohen, re: lack of data contained in the Remedial Investigation/Feasibility Study prepared for the Berks Associates Site by NUS Corporation, 4/21/86. P. 44-48. Technical concerns regarding Douglassville Remedial Investigation/Feasibility Study are attached to the letter.

8) Letter to Mr. Jeffrey A. Pike, U.S. EPA, from Mr. George V. Gartseff, NUS Corporation, re: Remedial Investigation/Feasibility Study Test Pit Logs for the Douglassville Disposal Site, 6/24/86. P. 49-49.

9) Letter to Mr. Jeffrey A. Pike, U.S. EPA, from Mr. George V. Gartseff, NUS Corporation, re: transmittal of file memos supporting Feasibility Study and Record of Decision calculations for the Douglassville Disposal Site, 6/24/86. P. 50-50.

10) Letter to Mr. Jack Kelly, U.S. EPA, and Mr. Victor J. Janosik, U.S. EPA, from Mr. Edgar P. DeVylder, General Signal Corporation, re: critique of Draft Phase II Remedial Investigation/Feasibility Study Work Plan, 8/7/87. P. 51-59. The critique is attached to the letter.

11) Letter to Mr. Jack Kelly, U.S. EPA, and Mr. Victor Janosik, U.S. EPA, fro[illegible] Mr. Edgar P. DeVylder re: critique of Draft Phase II Remedial Investigati[illegible] Feasibility Study Work Plan, 8/19/87. P. 60-63. A memorandum regarding estimated cost savings is attached to the letter.

12) Letter to Mr. Edgar P. DeVylder, General Signal Corporation, from Mr. Victor J. Janosik, U.S. EPA, re: Berks Associates Steering Committee letters of August 7, 1987 and August 19, 1987, 9/8/87. P. 64-70. A report entitled "Toxicity Characteristic Leaching Procedure" is attached to the letter.

13) Letter to Mr. James Heenehan, U.S. EPA, from Mr. Ed DeVylder, General Signal Corporation, re: critique of Phase II Remedial Investigation/Feasibility Study Final Work Plan, 9/18/87. P. 71-78. The critique is attached to the letter.

REMEDIAL IMPLEMENTATION
Remedial Design

1) Report: Safety, Health, and Emergency Response for Pre-Design Field Investigation at Douglassville Disposal Superfund Site, Douglassville, Pennsylvania, prepared by Donohue & Associates, 2/87. P. 1-97.

2) Report: Quality Control Plan for Pre-Design Field Investigation at Douglassville Disposal Superfund Site, Douglassville, Pennsylvania, prepared by Donohue & Associates, 3/23/87. P. 98-381. A transmittal record is attached to the report.

3) Report: Sampling and Analysis Plan for Pre-Design field Investigation at Douglassville Disposal Superfund Site, Douglassville, Pennsylvania, prepared by Donohue & Associates, 3/23/87. P. 382-420. A transmittal record is attached to the report.

4) Report: Predesign Report, Douglassville Disposal Superfund Site, Douglassville, Pennsylvania, Volume I, prepared by U.S. Army Corps of Engineers, 3/88. P. 421-767. References are listed on P. 518-522.

5) Report: Predesign Report, Douglassville Disposal Superfund Site, Douglassville, Pennsylvania, Volume II, prepared by U.S. Army Corps of Engineers, 3/88. P. 768-987.

COMMUNITY INVOLVEMENT
Community Relations Plan

1) Report: Community Relations Plan for Douglassville Disposal Site, Union Township, Berks County, Pennsylvania, prepared by EBASCO Services Incorporated, 1/13/88. P. 1-21.

GENERAL GUIDANCE DOCUMENTS *

1) "Promulgation of Sites from Updates 1-4," Federal Register, dated 6/10/86.

2) "Proposal of update 4," Federal Register, dated 9/18/85.

3) Memorandum to U. S. EPA from Mr. Gene Lucero regarding community relations at Superfund Enforcement sites, dated 8/28/85.

4) Groundwater Contamination and Protection, undated by Mr. Donald V. Feliciano on 8/28/85.

5) Memorandum to Toxic Waste Management Division Directors Regions I-X from Mr. William Hedeman and Mr. Gene Lucero re: Policy on Floodplains and Wetlands Assessments for CERCLA Actions, 8/6/85.

6) Guidance of Remedial Investigations under CERCLA, dated 6/85.

7) Guidance on Feasibility Studies under CERCLA, dated 6/85.

8) "Proposal of Update 3," Federal Register, dated 4/10/85.

9) Memorandum to Mr. Jack McGraw entitled "Community Relations Activites at Superfund Sites - Interim Guidance," dated 3/22/85.

10) "Proposal of Update 2," Federal Register, dated 10/15/84

11) EPA Groundwater Protection Strategy, dated 9/84.

12) Memorandum to U.S. EPA from Mr. William Heckman, Jr. entitled "Transmittal at Superfund Removal Procedures - Revision 2," dated 8/20/84.

13) "Proposal of Update 1," Federal Register, dated 9/8/83.

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